**REPLY UNDER 37 CFR 1.116-EXPEDITED PROCEDURE-
TECHNOLOGY CENTER 1615**

This listing of claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently amended) A multilayered biocompatible structure comprising:

a biopolymer membrane; and

a biopolymer product in contact with the biopolymer membrane;

wherein the biopolymer membrane **(i)** in its substantially dry form has a thickness equal to or less than about 75 microns, a solvent content less than about 5% by weight of the membrane, a radius of curvature of less than about 5 centimeters, **and** a density greater than about 1 g/cm^3, and **(ii) has** a maximum pore size in its **compressed, dehydrated form of about 5 microns, and in its** hydrated form of about 20 microns.

2. (Original) The structure of claim 1 wherein the biopolymer membrane comprises a blend of a biomaterial and thrombin.

3. (Original) The structure of claim 2 wherein the biomaterial is autologous.

4. (Original) The structure of claim 3 wherein the biomaterial is selected from the group consisting of fibrin, fibrinogen, chondroitin-4 sulfate, dermatan sulfate, keratin sulfate, hyaluronic acid, chitosan, chitin, alginate, laminin, elastin, fibronectin, collagen, proteoglycan, glycosaminoglycan, and mixtures thereof.

5. (Original) The structure of claim 1 wherein the biopolymer product comprises a blend of a biomaterial and thrombin.

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6. (Original) The structure of claim 5 wherein the biomaterial is autologous.

7. (Original) The structure of claim 6 wherein the biomaterial is selected from the group consisting of fibrin, fibrinogen, chondroitin-4 sulfate, dermatan sulfate, keratin sulfate, hyaluronic acid, chitosan, chitin, alginate, laminin, elastin, fibronectin, collagen, proteoglycan, glycosaminoglycan, and mixtures thereof.

8. (Original) The structure of claim 1 wherein the structure further comprises an additive mixed with the biopolymer membrane or the biopolymer product.

9. (Currently amended) The structure of claim 8 wherein the additive is selected from the group consisting of processing aids, a radioactive marker, a calcium containing compound, an antibody, an antimicrobial agent, an agent for improving the biocompatibility of the structure, proteins, an anticoagulant, an anti-inflammatory compound, a compound reducing graft rejection, any living cell, cell growth inhibitors, agents stimulating endothelial cells, antibiotics, antiseptics, analgesics, antineoplastics, polypeptides, protease inhibitors, vitamins, cytokine, cytotoxins, minerals, proteins, interferons, hormones, polysaccharides, genetic materials, proteins promoting or stimulating the growth and/or attachment of endothelial cells on the cross-linked biopolymer, growth factors, cell growth factors, growth factors for heparin bond, tannic acid, nerve growth factor, neurotrophic factor (NTFs), neurothrophin 3 (NT3), brain derived NTF (BDNTF), cilary NTF (CNTF), substances against cholesterol, pain killers, collagen, osteoblasts, chondroblasts, chondrocytes, osteoclasts, hematopoeitic cells, stromal cells, osteoprogenitor cells, keratinocytes cells, anti coagulants, poly DL lactate, alginate, recombinate material, triglycerides, fatty acids, C_{12}-C_{24} fatty acids, collagen, any pharmaceutical agent, activable factor VII, activable factor IX, activable factor X, activable factor XI, activable plasmin, **photoactivable** ~~photactivable~~ t-PA, photoactivable urokinase, taxol, cytostatic agent, antigenic agent, **plasminogen** ~~**plasiminogen**~~, compounds activating the conversion of

plasminogen into plasmin, compounds inhibiting the conversion of plasminogen in plasmin, and mixtures thereof.

10. (Original) The structure of claim 9 wherein the processing aid is a cryoprotectant.

11. (Currently amended) The structure of claim 10 wherein the cryoprotectant is **glycerol** ~~**glycerol**~~, dimethyl sulfoxide, or trehalose.

12. (Original) The structure of claim 9 wherein the radioactive marker is Technitium-99-m-HDP or an iodine isotope.

13. (Original) The structure of claim 9 wherein the substances against cholesterol are statins or stanols.

14. (Original) The structure of claim 9 wherein the pharmaceutical agent is selected from the group consisting of antibiotics, antiseptics, analgesics, and antineoplastics.

15. (Original) The structure of claim 9 wherein the compound that activates the conversion of plasminogen into plasmin is selected from the group consisting of t-PA, u-KA, su-PA, and streptokinase.

16. (Original) The structure of claim 9 wherein the compound that inhibits the conversion of plasminogen in plasmin is selected from the group consisting of aprotinin, tranexanic acid, a2-antiplasmins, a2-macroglobulins, a2-antitrypsin, antithrombin, antistreptokinase, aminocapronic acid, tranexamic acid, C1-esterase inhibitor, and anti-urokinase.

17. (Original) The structure of claim 1 wherein the biopolymer membrane is cross-linked.

18. (Original) The structure of claim 1 wherein the biopolymer membrane is sterilized.

19. (Original) The structure of claim 2 wherein the thrombin is natural, recombinant, or a mixture thereof.

20. (Original) The structure of claim 5 wherein the thrombin is natural, recombinant, or a mixture thereof.

21. (Original) The structure of claim 2 wherein the thrombin is activable.

22. (Original) The structure of claim 5 wherein the thrombin is activable.

23. (Original) The structure of claim 1 wherein the thickness of the biopolymer membrane is equal to or less than about 45 microns.

24. (Canceled)

25. (Canceled)

26. (Previously presented) The structure of claim 1 wherein the maximum pore size of the biopolymer membrane in its dehydrated form is about 1 micron.

27. (Previously presented) The structure of claim 1 wherein the maximum pore size

of the biopolymer membrane in its dehydrated form is about 0.10 micron.

28. (Previously presented) The structure of claim 1 wherein the maximum pore size of the biopolymer membrane in its dehydrated form is about 0.01 micron.

29. (Currently amended) A multilayered biocompatible structure comprising:

a first blend of a biomaterial and thrombin defining a biopolymer membrane;

a second blend of a biomaterial and thrombin defining a biopolymer product;

wherein the biopolymer membrane contacts the biopolymer product; and

wherein the biopolymer membrane**; (i)** in its substantially dry form has a thickness equal to or less than about 75 microns, a solvent content less than about 5% by weight of the membrane, a radius of curvature of less than about 5 centimeters, **and** a density greater than about 1 g/cm^3, and **(ii) has** a maximum pore size in its **compressed, dehydrated form of about 5 microns, and in its** hydrated form of about 20 microns.

30. (Original) The multilayered biocompatible structure of claim 29 wherein the biomaterial of the first blend is fibrinogen.

31. (Original) The multilayered biocompatible structure of claim 29 wherein the thickness of the biopolymer membrane is equal to or less than about 45 microns.

32-72. (Canceled)

73. (New) The structure of claim 9 wherein the additive is a calcium containing compound.

74. (New) The structure of claim 29 wherein the biomaterial of the first blend is

autologous.

75. (New) The structure of claim 74 wherein the biomaterial of the first blend is selected from the group consisting of fibrin, fibrinogen, chondroitin-4 sulfate, dermatan sulfate, keratin sulfate, hyaluronic acid, chitosan, chitin, alginate, laminin, elastin, fibronectin, collagen, proteoglycan, glycosaminoglycan, and mixtures thereof.

76. (New) The structure of claim 29 wherein the biomaterial of the second blend is autologous.

77. (New) The structure of claim 76 wherein the biomaterial of the second blend is selected from the group consisting of fibrin, fibrinogen, chondroitin-4 sulfate, dermatan sulfate, keratin sulfate, hyaluronic acid, chitosan, chitin, alginate, laminin, elastin, fibronectin, collagen, proteoglycan, glycosaminoglycan, and mixtures thereof.

78. (New) The structure of claim 29 wherein the structure further comprises an additive mixed with the biopolymer membrane or the biopolymer product.

79. (New) The structure of claim 78 wherein the additive is selected from the group consisting of processing aids, a radioactive marker, a calcium containing compound, an antibody, an antimicrobial agent, an agent for improving the biocompatibility of the structure, proteins, an anticoagulant, an anti-inflammatory compound, a compound reducing graft rejection, any living cell, cell growth inhibitors, agents stimulating endothelial cells, antibiotics, antiseptics, analgesics, antineoplastics, polypeptides, protease inhibitors, vitamins, cytokine, cytotoxins, minerals, proteins, interferons, hormones, polysaccharides, genetic materials, proteins promoting or stimulating the growth and/or attachment of endothelial cells on the cross-linked biopolymer, growth factors, cell growth factors, growth factors for heparin bond, tannic acid, nerve growth

factor, neurotrophic factor (NTFs), neurothrophin 3 (NT3), brain derived NTF (BDNTF), cilary NTF (CNTF), substances against cholesterol, pain killers, collagen, osteoblasts, chondroblasts, chondrocytes, osteoclasts, hematopoeitic cells, stromal cells, osteoprogenitor cells, keratinocytes cells, anti coagulants, poly DL lactate, alginate, recombinate material, triglycerides, fatty acids, C_{12}-C_{24} fatty acids, collagen, any pharmaceutical agent, activable factor VII, activable factor IX, activable factor X, activable factor XI, activable plasmin, photactivable t-PA, photoactivable urokinase, taxol, cytostatic agent, antigenic agent, plasiminogen, compounds activating the conversion of plasminogen into plasmin, compounds inhibiting the conversion of plasminogen in plasmin, and mixtures thereof.

80. (New) The structure of claim 79 wherein the processing aid is a cryoprotectant.

81. (New) The structure of claim 80 wherein the cryoprotectant is glyercol, dimethyl sulfoxide, or trehalose.

82. (New) The structure of claim 79 wherein the radioactive marker is Technitium-99-m-HDP or an iodine isotope.

83. (New) The structure of claim 79 wherein the substances against cholesterol are statins or stanols.

84. (New) The structure of claim 79 wherein the pharmaceutical agent is selected from the group consisting of antibiotics, antiseptics, analgesics, and antineoplastics.

85. (New) The structure of claim 79 wherein the compound that activates the conversion of plasminogen into plasmin is selected from the group consisting of t-PA, u-KA, su-PA, and streptokinase.

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86. (New) The structure of claim 79 wherein the compound that inhibits the conversion of plasminogen in plasmin is selected from the group consisting of aprotinin, tranexanic acid, a2-antiplasmins, a2-macroglobulins, a2-antitrypsin, antithrombin, antistreptokinase, aminocapronic acid, tranexamic acid, C1-esterase inhibitor, and anti-urokinase.

87. (New) The structure of claim 29 wherein the biopolymer membrane is cross-linked.

88. (New) The structure of claim 29 wherein the biopolymer membrane is sterilized.

89. (New) The structure of claim 29 wherein the thrombin is natural, recombinant, or a mixture thereof.

90. (New) The structure of claim 29 wherein the thrombin is activable.

91. (New) The structure of claim 29 wherein the maximum pore size of the biopolymer membrane in its dehydrated form is about 1 micron.

92. (New) The structure of claim 29 wherein the maximum pore size of the biopolymer membrane in its dehydrated form is about 0.10 micron.

93. (New) The structure of claim 29 wherein the maximum pore size of the biopolymer membrane in its dehydrated form is about 0.01 micron.

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94. (New) The structure of claim 79 wherein the additive is a calcium containing compound.